

Permit Fact Sheet

General Information

Permit Number:	WI-0056791-05-0
Permittee Name:	STATZ BROTHERS INC
Address:	5707 County Rd VV
City/State/Zip:	Marshall WI 53559
Discharge Location:	Main Farm – 2108 STH 19, Sun Prairie, WI 53590; B Dairy – 5707 County Road VV, Marshall, WI 53590; Oberts – 1648 Meadow Lane, Sun Prairie, WI 53590; Schuster – 2296 STH 19, Sun Prairie, WI 53590; Rich's – 6402 Twin Lane Road, Sun Prairie, WI 53590; Blaska – 2213 STH 19, Sun Prairie, WI 53590; Krebs – 6509 County Road VV, Sun Prairie, WI 53590; Long – 1926 STH 19, Sun Prairie, WI 53590
Receiving Water:	Tributaries of the Mauneshia River within the Mauneshia River Watershed, and groundwaters of the state
Stream Classification:	The Mauneshia River is considered impaired due to elevated Total Phosphorus and Total Suspended Solids

Animal Units

	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
Animal Type	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Milking and Dry Cows	6915	7063	0	0	
Heifers (400 lbs. to 800 lbs.)	204	340	0	0	
Heifers (800 lbs. to 1200 lbs.)	1665	1514	0	0	
Total	8784	7063	0	0	

Facility Description

Statz Brothers Inc is an existing Concentrated Animal Feeding Operation (CAFO). Statz Brothers Inc is owned and operated by Troy Statz. The operation consists of eight sites in Dane County. It currently has 8784 animal units which includes 5045 milking/dry cows and 1610 heifers. The operation does not plan to expand during the proposed permit term. Construction schedules have been included in the operation's proposed permit. Animals lots at the Blaska, Schuster, and Krebs sites will be closed. Engineering evaluations are required for the Main Farm feed storage runoff controls, Main Farm Lagoon 1, and Obert Farm manure storage facility. Permanent markers are also required to be installed on the Main Farm 19 Pit. Statz Brothers Inc has a total of 9062 acres available for land application of manure and process wastewater. Of this acreage, 3923 acres are owned and 5139 acres are rented.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/sample Contents and Treatment Description (as applicable)	
001	Liquid Manure Storage Units - Main Farm on the corner of CTH VV and SH 19. This includes the previously-permitted liquid manure storage units at the Main Farm and also includes those structures built during the previous permit term. Specifically, the existing structures are: 5/6 Confinement Pit - 1998 (2.2 million gallon concrete under floor); Heifer Confinement Pit - 1968 (125,000 gallon concrete under floor); Highway 19 Pit - 1992 (3.5 million concrete structure); Lagoon 1 - 1995 (5 million gallon earthen impoundment); and the Maternity Tank - 2001 (28,700 gallon precast concrete inground). The recently-constructed structure is Lagoon 2 - 2012 (20.8 million gallon, 60 mil HDPE liner over clay). Lagoon 1 will require an engineering evaluation in accordance with the Schedule section of the permit.	
003	Solid Manure Storage - Main Farm on the corner of CTH VV and SH 19. This sample point includes the existing solid manure storage units at the Main Farm and the roofed separated solids storage pad.	
005	Miscellaneous Solid Manure - Miscellaneous solid manure sources at Statz Brothers Inc. This sample point includes all eight sites. These are existing sources of solid manure that are not consistently mixed with liquid manure, or stored in a solid manure storage unit, shall be tracked under this sampling point. Representative samples of pen manure, bedding pack, or other solid manure shall be taken.	
006	Liquid Manure Storage - J. Blaska - Liquid Manure Storage Unit at the Jerome Blaska Farm on SH 19. This sample point includes the existing poured concrete under the floor 80,000 gallon manure storage unit installed in 1979.	
008	Liquid Manure Storage - B Dairy - Liquid Manure Storage Units at the B Dairy on CTH VV. This sample point includes all the existing liquid manure storage units at the B Dairy. Specifically, they are: Dairy Center - 1979 (concrete under-the-floor 100,000 gallons); and Confinement Barn Pens 51-54 - 1998 (concrete under-the-floor, 2.2 million gallons).	
012	Liquid Manure Storage - Oberts - Liquid Manure Storage Unit at the Oberts Farm on Meadow Lane. This sample point includes the existing concrete/earthen basin. This 450,000 gallon storage unit is constructed of poured concrete walls on 3 sides and a concrete and clay wall on one side. The manure storage unit was installed in 1982. This storage is currently out of service. It will be evaluated or abandoned in accordance with the Schedules section of the permit.	
018	Feed Storage Runoff Controls - This sample point covers the feed storage runoff controls at the Main Farm. The feed storage and commodity area is located on the northwest side of the farm and is all serviced by one runoff control system. This area includes a leachate collection system and vegetated treatment area. The leachate tanks, pipelines, and concrete floor areas were constructed in the fall of 2012. An evaluation for this system was submitted in March 2019. Upgrades may be necessary in accordance with the Schedules section of the permit.	
019	Feedlot Runoff Controls - J. Blaska -Feedlots at the Jerome Blaska Farm on SH 19. This sample point includes the outside concrete feed lots at the Blaska Site. Liquids from the concrete lot adjacent to Pen 15 are directed to an underbarn storage facility. The concrete lot adjacent to the Old Barn shall be abandoned in accordance with the Schedule section of the permit. Runoff control systems shall be monitored in accordance with the operation's monitoring and inspection program.	
025	Feedlot Runoff Controls - Schuster Farm - Feedlots at Schuster Farm on Skala Road. This sample point includes the outside feedlots on Schuster Farm. Specifically, this includes the lot east of the Heifer Building. This lot will be abandoned in accordance with the Schedules section of the permit.	

026	Feedlot Runoff Controls - Krebs Farm - Feedlots at the Lloyd Krebs Farm on CTH VV. This sample point includes the outside feedlots on Lloyd Krebs Farm. Specifically, this includes the main lot area and walkway from the Dry Cow Freestall to the covered fence line bunk. The concrete lot area will be abandoned in accordance with the Schedules section of the permit.	
028	Waste Transfer System B-Dairy - This manure transfer consists of drops at the middle of each freestall barn. Manure is pushed to the drops with a skid steer and gravity flows (flush flume) in a 24" pipe to a reception pit. The reception pit has two pumps; one will be a flush line for the 24" gravity flow pipe and the other will discharge to the Digester feed Reception tank. The milking center drains into a concrete reception tank that will also connect to this transfer system.	
029	Digester - B Dairy - This sample point is for an anaerobic digester system at B Dairy to produce energy via the combustion of biogas captured during the anaerobic digestion process. Biogas fuels a 600kW gen-set for electricity, and reclaimed solids are sold or used as bedding. These solids are stored in an enclosed building approximately 35' to the north of the digester. The digester vessel are constructed of concrete with a precast concrete cover positioned mostly underground to the west of the existing machine shed and southwest of the existing feed storage.	
030	Feed Storage Runoff Controls - B Dairy - This sample point is for visual monitoring and inspection of the feed storage area and associated runoff control system located at B Dairy. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to the operation's monitoring and inspection program.	
032	Liquid Manure Storage - B Dairy - This sample point is for the concrete Pipping Tank liquid manure storage facility with 300'x440' bottom dimensions, 20' deep, located approximately 75' west of the new freestall barn construction at B Dairy. The storage was constructed with plans and specifications approval in 2014.	
033	Digester Solids B Dairy - This sample point represents solids separated from liquid effluent from the digester. As stated in the digester sample point description (029), these solids will be sold or used as bedding. This sample point is created, however, in the event that these solids ever require land spreading and to demark the storage location of these materials in the enclosed building approximately 35' to the north of the digester.	
034	Digester - Main Farm - This sample point is for an anaerobic digester system located at the Main Farm to produce energy via the combustion of biogas captured during the anaerobic digestion process. Biogas fuels a 600kW gen-set for electricity, and reclaimed solids are sold or used as bedding. These solids are stored in an enclosed building to the southwest of the digester. The digester vessel is concrete with a precast concrete cover positioned mostly underground.	
035	Calf Barn Solids - B Dairy - Sample point 035 is for the solid manure storage structure located at B Dairy. This storage is a 3-walled concrete storage located to the west of the calf barn. This storage accepts solids from the adjacent calf barn.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as specified in s. NR 243.04, Wis. Adm. Code. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one-foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

The permittee currently has approximately 225 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 5045 milking/dry cows and 1610 heifers, it is estimated that approximately 83,551,337 gallons of manure and process wastewater 932 tons of solid manure will be produced per year. The permittee owns *approximately* 3923 acres of cropland and rents about 5139. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number of practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permittee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq 12\%$ solids) on frozen or snow-covered ground during February and March. Non-emergency surface applications of liquid manure ($< 12\%$) on frozen or snow-covered ground are prohibited.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as “Sampling Points.” For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

Sample Point Number: 001- Liquid Manure Storage - Main; 006- Liquid Manure Storage - Blaska; 008- Liquid Manure Storage-B Dairy; 012- Liquid Manure Storage - Oberts; 028- Waste Transfer System B-Dairy; 029- Digester - B Dairy; 032- Liquid Manure Storage- B Dairy; 034- Digester - Main Farm

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	
Phosphorus, Available		lb/1000gal	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.1 Explanation of Operation and Management Requirements

Liquid waste sources shall be sampled in accordance with the table above. Land application shall occur in accordance with the operation's approved nutrient management plan. Liquid waste storage facilities shall be monitored in accordance with the farm's monitoring and inspection program.

Sample Point Number: 003- Solid Manure Storage - Main; 005- Miscellaneous Solid Manure; 033- Digester Solids - B Dairy, and 035- Calf Barn Solids - B Dairy

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lbs/ton	Quarterly	Grab	
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.1.2 Explanation of Operation and Management Requirements

Solid waste sources shall be sampled in accordance with the table above. Land application shall occur in accordance with the operation's approved nutrient management plan. Solid waste storage facilities shall be monitored in accordance with the farm's monitoring and inspection program.

Sample Point Number: 018- Feed Storage Controls - Main; 019- Feedlot Controls - Blaska; 025- Feedlot Controls - Schuster; 026- Feedlot Controls - Krebs, and 030- Feed Storage Controls- B Dairy

1.1.3 Explanation of Operation and Management Requirements

Runoff control facilities shall be monitored in accordance with the farm's monitoring and inspection program.

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Update Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	01/31/2020

2.2 Monitoring & Inspection Program

Required Action	Due Date
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Update Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit an updated monitoring and inspection program within 30 days of the effective date of this permit.	01/31/2020
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2.3 Annual Reports

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Report #1:	01/31/2020
Submit Annual Report #2:	01/31/2021
Submit Annual Report #3:	01/31/2022
Submit Annual Report #4:	01/31/2023
Submit Annual Report #5:	01/31/2024
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

2.4 Nutrient Management Plan

Required Action	Due Date
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan by March 31st of each year. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	03/31/2020
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2021
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2022
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2023
Management Plan Annual Update #5: Submit an Annual Update to the Nutrient Management Plan.	03/31/2024
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.5 Blaska Lot Runoff Controls - Closure

Required Action	Due Date
Closure Plan: Submit a closure plan for the animal lot runoff control system to the Department for approval outlining the proposed method of abandonment.	01/31/2020
Complete Closure: Complete closure as approved by the Department.	03/31/2020

2.6 Schuster Lot Runoff Controls - Closure

Required Action	Due Date
Closure Plan: Submit a closure plan for the animal lot runoff control system to the Department for approval outlining the proposed method of closure.	01/31/2020
Complete Closure: Complete closure as approved by the Department.	03/31/2020

2.7 Krebs Lot Runoff Controls - Closure

Required Action	Due Date
Closure Plan: Submit a closure plan for the animal lot runoff control system to the Department for approval outlining the proposed method of abandonment.	01/31/2020
Complete Closure: Complete closure as approved by the Department.	03/31/2020

2.8 Main Farm 19 Pit Permanent Markers - Installation

Required Action	Due Date
Complete Installation: Complete installation of permanent markers on the 19 Pit. The facility shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	01/31/2020

2.9 Main Farm Lagoon 1 - Engineering Evaluation

Required Action	Due Date
Written Report: Submit a written report evaluating Lagoon 1's ability to meet the conditions in the Production Area Discharge Limitations (Permit Section 1.1) and Manure and Process Wastewater Storage subsections (Permit Section 1.3) and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	12/31/2020
Plans and Specifications: If necessary, submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	03/31/2021
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2021

2.10 Main Farm Feed Storage Runoff Controls - Engineering Evaluation

Required Action	Due Date
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Written Description of Existing System: Submit a written description of the existing Main Farm feed storage runoff control system and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations (Permit Section 1.1) and Runoff Control subsections (Permit Section 1.2) and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	12/31/2020
Plans and Specifications: If necessary, submit plans and specifications for Department review and approval to permanently correct any adverse runoff control conditions in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	03/31/2021
Corrections and Post Construction Documentation: Complete construction of runoff controls that permanently correct any adverse runoff control conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2021

2.11 Obert's Manure Storage Facility - Engineering Evaluation or Abandonment

Required Action	Due Date
Written Report: Submit a written report describing how the existing manure storage will be abandoned or a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations (Permit Section 1.1) and Manure and Process Wastewater Storage (Permit Section 1.3) subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	12/31/2020
Plans and Specifications: If necessary, submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	03/31/2021
Corrections and Post Construction Documentation: Complete construction or abandonment of the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2021

2.12 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	06/30/2024

2.13 Explanation of Schedules

Schedule items 2.5, 2.6, and 2.7 each require closure of an animal lot at the Blaska, Schuster, and Krebs locations. Statz Brothers Inc. raises some youngstock at offsite locations, so use of these animal lots is no longer necessary. Schedule item 2.8 requires the installation of permanent markers on the 19 Pit at the Main Farm. These markers were not observed during the previous inspection. Schedule items 2.9 and 2.10 require engineering evaluations of the Main Farm Lagoon 1 and Main Farm feed storage runoff control system. These evaluations are required in accordance with s. NR 243.16(2). Schedule item 2.11 is required to evaluate or abandon the waste storage facility at Obert's site. This facility has not been used for an extended period of time. An engineering evaluation of this facility is required prior to use. If the facility is not intended for use, then the facility must be properly abandoned.

Special Reporting Requirements

There are no special reporting requirements for Statz Brothers Inc.

Attachments:

Substantial Compliance Determination

Inspection Report

Nutrient Management Plan Conditional Approval Letter

Proposed Expiration Date:

January 31, 2024

Justification Of Any Waivers From Permit Application Requirements

There were no waivers from permit application requirements for Statz Brothers Inc.


Prepared By:



Tyler Dix Agricultural Runoff Management Specialist

Date: October 15, 2019

Substantial Compliance Determination

Permittee Name: STATZ BROTHERS INC		Permit Number: 0056791-05-0
	Compliance?	Comments
Discharge Limits	Yes	
Sampling/testing requirements	Yes	
Groundwater standards	Yes	
Reporting requirements	Yes	
Compliance schedules	Yes	
Management plan	Yes	
Other:	NA	
Enforcement Considerations	No	
In substantial compliance?	<p>Yes</p> <p>Comments: Statz Brothers was issued a notice of violation in May 2019 due to issues with land application and missing a permit reissuance application. Statz Brothers Inc. has returned to compliance and the notice of violation is being closed.</p> <p>Signature: Tyler Dix Date: October 15, 2019</p>  <p>Concurrence: Yes</p> <p style="text-align: right;">Date: 10-15-2019</p>	



June 27, 2018

Troy Statz
Statz Brothers Inc.
5707 County Road VV
Marshall WI 53559

Subject: May 7, 2018 Permit Reissuance Inspection Summary

Dear Troy Statz:

On May 7, 2018 department staff met you and Amanda Jolma at Statz Brothers Inc. for a permit reissuance inspection. A full inspection of all sites except the Long Farm was conducted. The following is required to be submitted via the department's ePermitting system for a complete final application:

- 1) 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
- 2) 3400-025a form (Animal Units Calculation Worksheet)
- 3) 3400-025b form (Nutrient Management Plan Checklist)
- 4) 3400-025c form (Reviewable Facilities of Systems Checklist)
- 5) Labelled Aerial Maps
- 6) 180-day Liquid Storage Calculations
- 7) 5-year Nutrient Management Plan
- 8) Evaluations for existing reviewable facilities (listed on the final page of the inspection report)

Each of the 3400 forms are provided by the ePermitting system. An environmental analysis questionnaire is not required for your operation. No engineering plans and specifications are required since you do not plan to construct any reviewable structures during the proposed permit term. Department observations and a record of our discussion is included in the enclosed report. A complete final permit reissuance application was due by March 31, 2018. An application should be submitted as soon as possible. Please contact me if you have any questions at 608-275-3237 or Tyler.Dix@wisconsin.gov.

Sincerely,

Tyler Dix
Agricultural Specialist

Enclosure: CAFO Inspection Report

Electronic CC: Christina Schroeder, TEAM Engineering
Dave Buss, Nu Solutions Agronomy
Clare Freix, Tom Bauman, Mark Cain – Wisconsin DNR

CAFO Compliance Report June 27, 2018



Inspection Date: May 7, 2018

Inspection Type: Permit Reissuance

Operation Name: Statz Brothers Inc

WPDES Permit No. WI-0056791-04-0

Farm Address: 5707 County Rd VV, Marshall, WI 53559

On-Site Representative(s): Troy Statz, Amanda Jolma

Report Writer: Tyler Dix

On May 7th Tyler Dix and Mark Cain (WDNR) met with Troy Statz and Amanda Jolma (Statz Brother's Inc.) for a permit reissuance inspection. Also present was Christina Schroeder (engineering consultant) and Dave Buss (crop consultant). The meeting began at 9:30 am and concluded by approximately 3:30 pm. Precipitation did not occur at the time of inspection and no samples were collected. The B Shop no longer houses animals and will be removed from the permit.

Home Farm

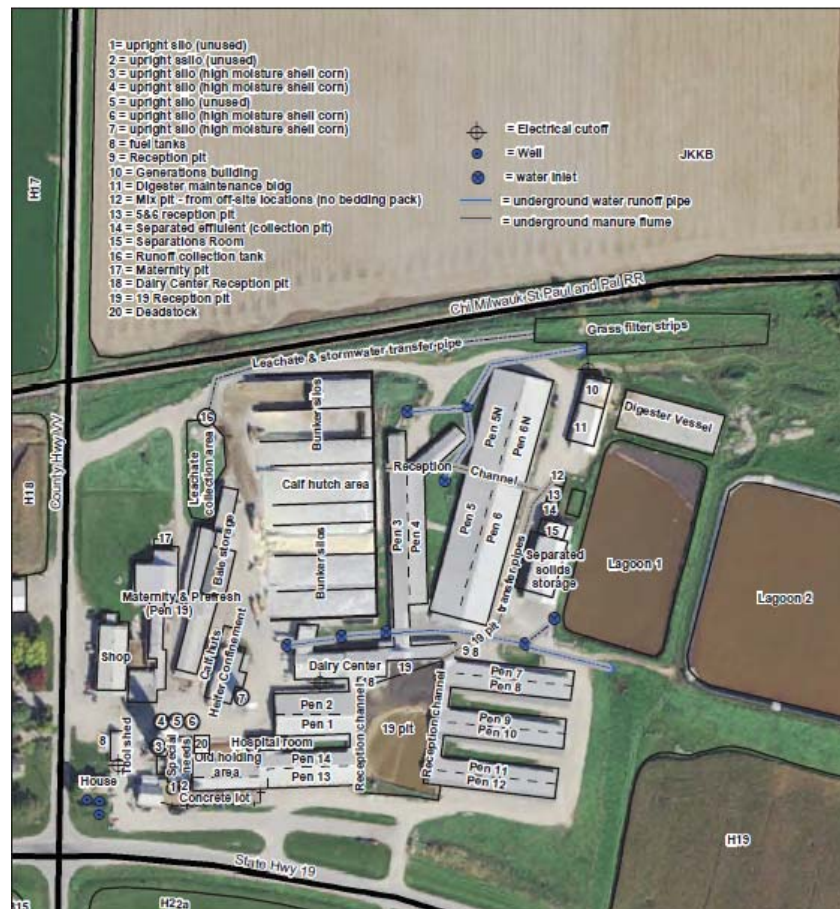


Photo 1 – Home Farm

SITE OBSERVATIONS

Animal Housing

All animals are contained under roofed systems except for the two calf hutch areas. All freestall barns are handled as liquid systems that direct liquids to the digester vessel. The heifer confinement, maternity pen, and calf hutches are handled as solid manure systems. Manure from these areas is regularly hauled to the solids storage area, headland stacking sites or is land applied in accordance with the operation's approved nutrient management plan. The calf hutch area runoff is directed to a first-flush collection system and vegetated treatment area (VTA).



Photo 2 – Freestall Barns



Photo 3 – Calf Hutch Area within Feed Bunkers



Photo 4- Calf Hutch Area

Waste Storage Facilities

Manure and process wastewater from all freestall barns and the parlor is directed to the digester vessel and then to the solids separation building. Liquids are directed to Lagoon 1 and solids are stored in the solids storage building. Liquids then flow from Lagoon 1 to Lagoon 2. Manure freely flows between Lagoon 2 and the 19 Pit since the waste storage facilities are located at the same elevation. All pumping is done from the 19 Pit. Solid and liquid waste storage facilities are managed to not have current or past indicators of discharges. An evaluation of Lagoon 1 will be required as part of the final permit application due to the age of the facility. In addition, evidence of scouring was observed at two of the pipe inlets. Permanent markers are also needed on the 19 Pit. Lagoon 2 is a HDPE lined waste storage and the 19 Pit is concrete lined. Lagoon 2 and Pit 19 appeared to meet permit requirements.



Photo 5 – Lagoon 1



Photo 6 – Lagoon 1 Markers



Photo 7 – Lagoon 2

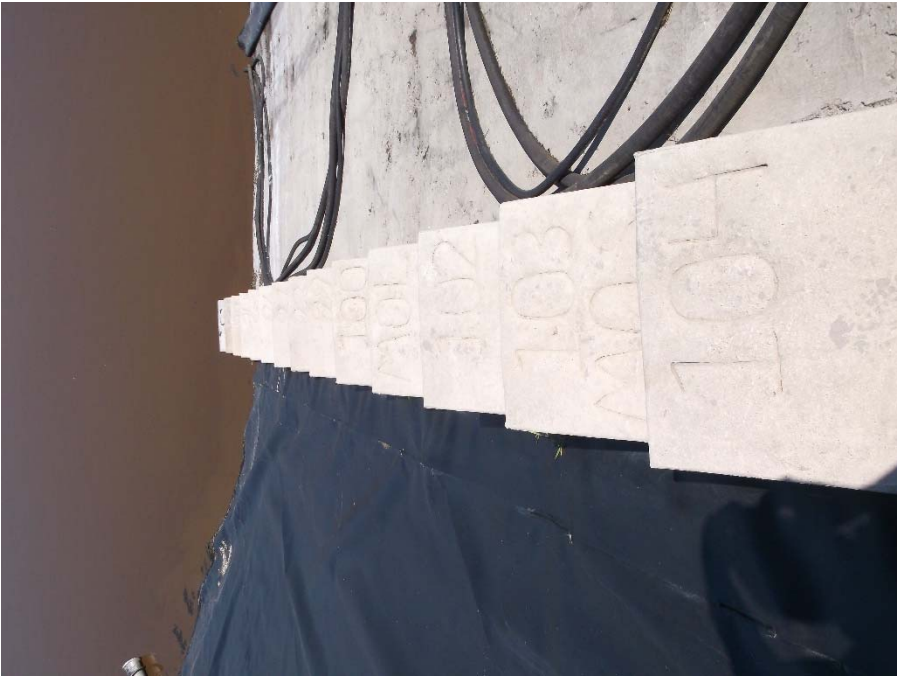


Photo 8 – Lagoon 2 Markers



Photo 9 – 19 Pit

Feed Storage Area Runoff

The Main Farm has a series of eight concrete feed bunkers. Only three bunkers are being used to store haylage. One of the bunkers is being used to house calf hutches. There are additional calf hatches located adjacent to the heifer confinement. Runoff from the bunkers and both calf hatch areas drain to a first-flush collection system. Overflow from the collection system is directed to a VTA. The VTA was full of dead grass. The spreader bar was also clogged with dead vegetation. At the end of the VTA manure and process wastewater was being collected in a detention pond. The VTA requires an engineering evaluation as part of the permit application due to its age, poor condition of the vegetation, observed black matter, and the plugged spreader bar.



Photo 10 – Feed Storage Bunkers



Photo 11 – First Flush Collection



Photo 12 – VTA Spreader



Photo 13 – VTA Spreader



Photo 14 – VTA



Photo 15 –Detention Pond located at the end of the VTA

B Farm



Photo 16 – B Farm Overview

SITE OBSERVATIONS

Animal Housing

All animals are confined to roofed systems that do not pose runoff concerns. An expansion of Pen 51-54 may be planned for the next permit term. Manure and process wastewater from the parlor and freestall barns is directed to a reception tank located between the manure digester and freestall barns. The calf barn is handled as a solid manure system that is regularly hauled to land application sites or headland stacking areas.



Photo 17 – Calf Barn



Photo 18 – Freestall Barns

Waste Storage Facilities

Manure and process wastewater from the reception tank flows to the manure digester. Solids are then directed to the solids building and liquids are directed to the B Tank. The B Tank is a concrete Pipping tank that appeared to meet permit requirements. The farm is planning to install a gate at the entrance of the B Tank. There is a staging pad located adjacent to the calf barn for temporary solids storage. A flow path was observed leaving this pad. It was explained that the pad should not be used for longer than 24-hours or during precipitation events. Work is planned to remove the concrete blocks behind the pad to prevent ponding of rain water.



Photo 19 – B Tank



Photo 20 – B Tank Markers



Photo 21 – Calf Barn Staging Pad



Photo 22 – Calf Barn Staging Pad Runoff

Feed Storage Area Runoff

Feed is stored within a series of concrete bunkers on the north end of the site. Leachate and precipitation runoff from the bunkers is directed to a first-flush collection system. Contents from the collection tank are pumped to the reception tank and eventually to the B Tank. Overflow from the collection system is directed to a VTA. Burnout from leachate was evident throughout the section of the VTA closest to the spreader bar.



Photo 23 – Feed Bunkers



Photo 24 – First Flush Collection



Photo 25 – VTA Spreader



Photo 26 – VTA



Photo 27 – VTA

Blaska Farm

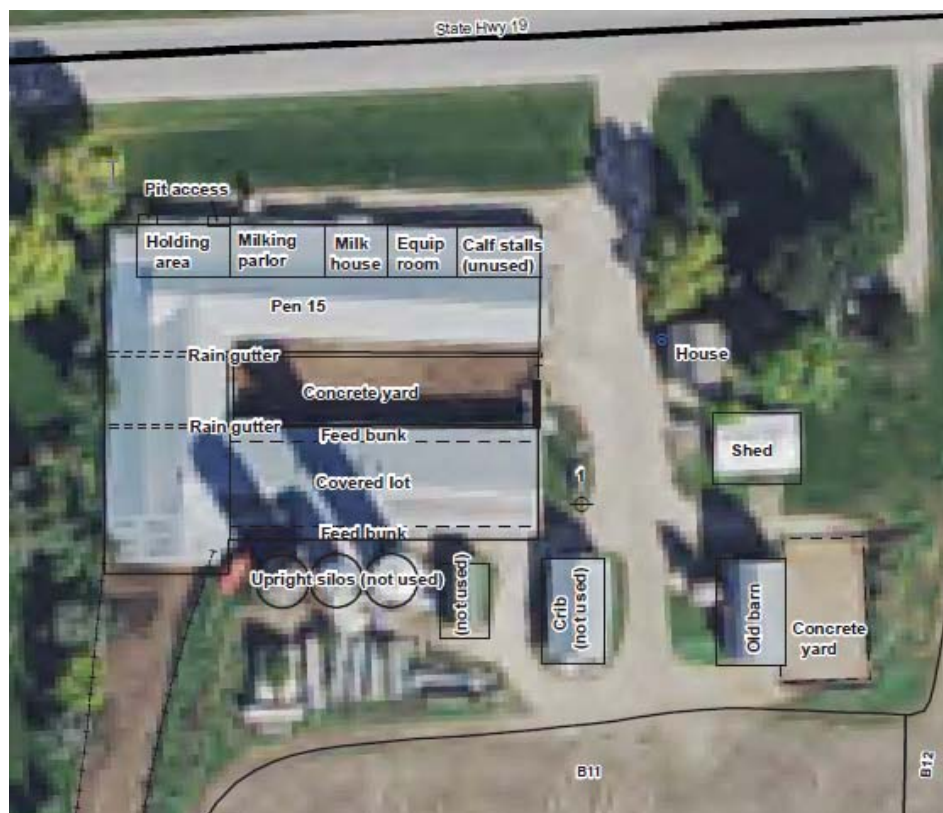


Photo 28 – Blaska Overview

SITE OBSERVATIONS

Manure and precipitation runoff from Pen 15, the west concrete yard, and the covered lot is collected within an underbarn storage beneath Pen 15. This system appeared to meet permit requirements at the time of inspection. On the east side of the site is an old barn with an outdoor adjacent concrete yard. The concrete yard lacks runoff controls. An evaluation of this outdoor lot is required with the final permit application due to the age of the facility. A pasture is located south of the site that has not been used and will remain closed throughout the permit term.



Photo 29 – West Concrete Yard



Photo 30 – East Concrete Yard



Photo 31 - Pasture



Photo 32 – Under barn Waste Storage

Krebs Farm



Photo 33 – Krebs Overview

SITE OBSERVATIONS

Krebs Farm has four roofed areas for housing animals. The calf barn also has an adjacent outdoor lot. Evidence of runoff from this lot and Pen 18 was observed flowing to the south beyond a 5' wall made of concrete blocks towards an intermittent stream that eventually flows to the Mauneshia River. Significant burnout of vegetation was observed beyond this wall. An evaluation of the runoff controls for the outdoor lot and Pen 18 is required with the final permit application due to the age of the facility and a change in use because of the addition of the gap in the 5' wall. An outdoor vegetated area adjacent to Pen 17 is used to house bull calves. This small outdoor vegetated area appeared to meet permit requirements.



Photo 34 – Calf Barn and Outdoor Lot



Photo 35 – Pen 18



Photo 36 – Pen 17



Photo 37 – Gap in 5' wall to allow runoff to flow from Pen 18 and Calf Barn



Photo 38 – Immediately beyond the 5' wall



Photo 39 – Flow path



Photo 40 – Outdoor Vegetated Area

Oberts Farm



Photo 41 – Oberts Overview

SITE OBSERVATIONS

Animal Housing

Calves and heifers are housed within three roofed barns at Oberts Farm. No runoff concerns were observed with any of the animal housing areas.



Photo 42 – Calf Barn (left) and Roofed Lot (right)



Photo 43 – Roofed Lot

Waste Storage Facility

Manure from the animal housing areas is transferred to a concrete waste storage facility. An engineering evaluation of this storage is required with the final permit application due to the age of the facility. This storage also requires the installation of permanent markers.



Photo 44 – Manure Pit

Feed Storage Area Runoff

A single concrete feed bunker is located at this site. The bunker was not in use at the time of inspection and is not planned to be used during the upcoming permit term.



Photo 45 – Feed Bunker (not used)

Rich's Farm



Photo 46 – Rich's Overview

SITE OBSERVATIONS

Animal Housing

All animals are housed within three roofed barns. No runoff concerns were observed with any of the barns. Each barn is managed as a solid manure system that is regularly hauled to headland stacking sites or land applied in accordance with the farm's approved nutrient management plan.



Photo 47 – Freestall Barns

Schuster Farm



Photo 48 – Schuster Overview

SITE OBSERVATIONS

Animal Housing

Schuster Farm contains a single calf barn with an adjacent outdoor animal lot. Runoff from the barn roof flows directly onto the outdoor lot. A pond on the driveway east of the grass filter area showed evidence of manure. This site was last evaluated during the 2013 permit reissuance.



Photo 49 – Calf Barn and Outdoor Lot



Photo 50 – Outdoor Lot Runoff

Long Farm



Photo 51 – Long Overview

SITE OBSERVATIONS

The Long Farm was not visit during the inspection. All animals are housed within five barns or roofed lots.

CONCLUSION

Animal Mortality Disposal

Animal mortalities are managed to not have current or past indicators of discharges. A rendering service is hired to pick up carcasses.

Substantial Compliance

The permittee is in substantial compliance with the permit.

Areas of Concern

The staging pad located adjacent to the B Farm calf barn requires better management to meet permit requirements. The stacking area should hold solids for less than 24 hours and should not be used during any precipitation event.

The B Farm VTA showed burnout from leachate and should be revegetated. The spreader bar was also clogged and should be cleaned.

The Schuster Farm outdoor lot is an area of concern due to evidence of manure beyond the grass filter strip. This area should be monitored and maintained to prevent discharges of pollutants.

Required Actions

- 1) Home Farm VTA engineering evaluation
- 2) Home Farm Lagoon 1 engineering evaluation
- 3) Home Farm 19 Pit permanent marker installation
- 4) Oberts Farm waste storage facility engineering evaluation
- 5) Krebs Farm animal lot runoff control system engineering evaluation
- 6) Blaska Farm animal lot runoff control system engineering evaluation



August 22nd, 2019

Dane
Approval

Troy Statz
Statz Brothers, Inc
5707 County Road VV
Marshall, WI 53559

SUBJECT: Conditional Approval of Statz Brothers, Inc Nutrient Management Plan, WPDES Permit
No. 0056791-05-0

Dear Mr. Statz:

After completing a review of Statz Brothers, Inc 2020-2024 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with s. NR 243.14, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends Statz Brothers, Inc review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Statz Brothers, Inc may have:

- Soils that may have bedrock or groundwater within 24 inches of surface,
- Multiple setback areas due to streams, conduits to streams, grassed waterways, wetlands or wells, and
- Evidence of possible soil erosion/flow channels. Note: road ditches or other man made channels may be considered flow channels or conduits to navigable water and may be subject to a SWQMA and setback.

Reviewing the NMP and checking fields for these features and soil conditions prior to manure applications will help Statz Brothers, Inc maintain compliance with their WPDES permit and Ch. NR 243 requirements.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 8,784 animal units (5,045 milking & dry cows, 1,610 heifers, and 0 calves). Currently there are no planned expansions in the next permit term.
2. Manure generation and spreading records indicate your herd will annually generate approximately 83,551,337 gallons of manure and process wastewater and 932 tons of solid manure in the first year of the permit term.
3. The use of application restriction options 1, 2, & 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Statz Brothers, Inc currently has 9,062 acres (3,923 owned and 5,139 controlled through contracts, rental agreements or leases, or under manure agreements) of which 8,667 are spreadable acres.

6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Maunesh River (listed 303(d) impaired water by 'Total Phosphorus', 'Sediment', & 'Total Suspended Solids'), Upper Koshkonong (listed 303(d) impaired water by 'Unknown Pollutant' & 'Total Phosphorus'), Lower Koshkonong Creek (listed 303(d) impaired water by 'Total Phosphorus'), Lake Koshkonong (listed 303(d) impaired water by 'Total Phosphorus', 'Sediment', & 'Total Suspended Solids'), and Mud Creek (listed 303(d) impaired water by 'Total Phosphorus', 'Sediment', & 'Total Suspended Solids').
7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That Statz Brothers, Inc currently has at least 225 days of storage for liquid manure, process wastewater and rainfall and at least 59 days of storage for solid manure.

	<i>Total Volume</i>	<i>Maximum Operating Level (MOL) Volume</i>
Home 19 Pit	3,400,000 gal	3,002,625 gal
Home Lagoon 1	6,000,000 gal	4,951,990 gal
Home Lagoon 2	22,584,978 gal	20,791,760 gal
B-Farm B Tank	24,514,406 gal	22,676,873 gal

9. That 44 fields are tiled.

- 24	- B20	- B21
- B28	- B29	- B30a
- B30b	- B32	- CO4
- CS1	- CS2-7	- DK7-8
- FB1	- H11-14	- H19-21
- H22	- H23	- JKJA
- JKJB	- MB4	- MH2
- MT1	- MT2	- O14-16
- O17	- O19	- PW1-2
- PW3	- RP5-6	- RP7
- RS1-3	- RW14-16	- RW17-19
- RW20-21	- RW24-25	- SP3
- TM15-19	- TM20	- VN1-3
- W1-2	- Y12	- Y13
- Y18	- Y19-20	

10. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
11. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2020-2024 Statz Brothers, Inc Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.
2. The following fields are prohibited from receiving applications of manure or process wastewater:

- HA4 (short soil samples)	- JBG1 (short soil samples)	- JBG2 (short soil samples)
- PL3 (short soil samples)	- Lake 2 (need current soil test)	- LE1 (need current soil test)
- PL1 (need current soil test)		

If Statz Brothers, Inc wishes to use these fields for applications of manure or process wastewater all necessary information shall be submitted to the Department prior to application to demonstrate compliance with NR 243 and other applicable codes. Written Department approval amending this condition approval must be received prior to application.

3. If existing fields yield a soil test results greater than or equal to 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.
4. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, phosphorus, potassium, and sulfur.
5. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Statz Brothers, Inc may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = \text{NH}_4\text{-N} + [0.25 \times (\text{Total N} - \text{NH}_4\text{-N})]$$

6. Statz Brothers, Inc shall record daily manure applications by using form 'Daily Spreading Log for Manure Applicators'. These forms shall be retained at the farm and provided to the department upon request.
7. Statz Brothers, Inc shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using form 'DNR CAFO Annual Spreading Report'.

WINTER SPREADING

8. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.
9. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

- B11-12	- B13-15	- B16
- B17	- B24	- B25
- B26	- B27	- B29
- B30a	- BG1	- BG2
- BH05	- BH06	- BH16
- BH17	- BKE2	- BW1
- BW2	- BW3	- BW4

- CD5	- CD6-8	- CS2-7
- DK4	- DK5-6	- DK9
- GS3	- GS4	- GW2
- H11-14	- H15-17	- H18
- H19-21	- H22	- H23
- HB2	- HB3	- HS1
- JH1-2	- JKJA	- JKJB
- JKKB	- LK1-2	- LK3-5
- MH2	- MM1-2	- MM5
- O14-16	- O18	- O20
- O21	- PM1	- PW1-2
- PW3	- RH11-12	- RH16
- RH17	- RH19	- RP1-4
- RW14-16	- RW17-19	- RY1
- RY2-4	- RY5-6	- S1
- S2	- S2a	- S3
- S4	- SP3	- TM10-12
- TM13	- TM14	- VN1-3
- VN5	- VS6	- Y10
- Y11	- Y12	- Y13
- Y14	- Y18	- BH09
- MB4	-	-

10. Winter spreading of solid and liquid manure may not occur during the “high risk runoff period” pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.
11. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.
12. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

13. The following sites are approved for winter headland stacking only for > 32% solids:

- 2a	- 2b	- 1a	- 1b
- 4b	- 6a	- 6b	- 7a
- 7b	- 9		

14. The following sites are approved for winter headland stacking only for 16-32% solids:

- 2c	- 1c	- 4a	- 4c
- 4d	- 5a	- 5b	- 8a
- 8b	- 8c	- 8d	- 10a
- 10b	- 11	- 12a	- 12b
- 3a	- 3b	- 3c	

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

16. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 608-261-6419 or Ashley.Scheel@Wisconsin.gov.

Sincerely,



Ashley Scheel, CCA
WDNR CAFO Nutrient Management Plan Reviewer
Wisconsin Department of Natural Resources

cc: Mark Cain, WDNR Agricultural Runoff Specialist (Mark.Cain@Wisconsin.gov)
Laura Bub, WDNR Watershed Field Supervisor (Laura.Bub@Wisconsin.gov)
Mary Anne Lowndes, WDNR Runoff Management Section Chief (MaryAnne.Lowndes@Wisconsin.gov)
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